

AMENDMENT TO THE CLAIMS

1. (currently amended) A system exchange method for automatically providing at least one system attribute to one or more Voice-over-Internet Protocol (IP) devices in a network, the method comprising the steps of:

(a) automatically sending a Voice-over-IP device identification message from the one or more Voice-over-IP devices to a node adjacent to the one or more Voice-over-IP devices when the one or more Voice-over-IP device devices is operably coupled to the node;

(b) automatically responding with a device identification acknowledgement message originating from the node to the one or more Voice-over-IP devices, the device identification acknowledgement message comprising one or more system attributes, including a virtual local area network (VLAN) identification of a Voice-over-IP VLAN assigned in the network and connectivity information;

(c) conveying the connectivity information from the one or more Voice-over-IP devices through the node to a private branch exchange system that maintains an external relation database; and

(d) associating the connectivity information at the external relation database with a geographic location of the one or more Voice-over-IP devices.

2. (previously presented) The system attribute exchange method of claim 1, wherein the device identification acknowledgment is a Voice-over-IP device identification acknowledgment

message and wherein there is a direct connection between the one or more Voice-over-IP devices and the node.

3. (canceled)

4. (original) The system attribute exchange method of claim 2, wherein the node is a switching device, and the one or more system attributes comprise a switching device identification as well as a port identification of a port to which the Voice-over-IP device is connected.

5. (currently amended) The system attribute exchange method of claim 3 2, wherein the one or more Voice-over-IP devices comprise one or more Internet Protocol (IP) phones.

6. (currently amended) The system attribute exchange method of claim 3 2, wherein the one or more Voice-over-IP device devices is operably coupled to the node at the time of initialization of the one or more Voice-over-IP device devices.

7. (currently amended) The system attribute exchange method of claim 3 2, wherein the Voice-over-IP device identification message and the Voice-over-IP device identification acknowledgment are Attribute Advertisement Protocol messages.

8. (currently amended) The system attribute exchange method of claim 7, wherein a destination address of the Voice-over-IP device identification message includes a unique medium access control (MAC) address indicative of a system attribute exchange between the one or more Voice-over-IP ~~device~~ devices and node.
9. (currently amended) The system attribute exchange method of claim 3 ~~2~~, wherein the Voice-over-IP device identification message is sent in response to a node initialization message.
10. (previously presented) The system attribute exchange method of claim 9, wherein the node initialization message is a switching device initialization message transmitted by a switching device upon the initialization of the switching device.
11. (canceled)
12. (previously presented) The system attribute exchange method of claim 1, wherein the system attribute comprises connectivity information pertaining to physical connection of the one or more Voice-over-IP devices at the node and wherein the relation database has one or more tables that associate the node and a slot number and a port number on which the one or more Voice-over-IP devices connect to the node with the known geographic distribution of the node in the network.

13. (currently amended) The system attribute exchange method of claim 12, wherein one or more system attributes are transmitted to a relation database that associates at least one port number to its geographic location, whereby the physical location of the one or more Voice-over-IP devices is determined from the IP address of the one or more Voice-over-IP ~~device~~ devices.
14. (currently amended) The system attribute exchange method of claim 13, wherein a storage device is included in an Internet Protocol (IP) private branch exchange (PBX) system that cooperates with the one or more Voice-over-IP ~~device~~ devices to provide voice communications.
15. (original) The system attribute exchange method of claim 1, wherein the node is a switching device.
16. (previously presented) The system attribute exchange method of claim 15, wherein the switching device is adjacent to at least one of the one or more Voice-over-IP devices.
17. (canceled)
18. (currently amended) The system attribute exchange method of claim ~~17~~ 15, wherein at least one of the one or more system attributes is a VLAN identification substantially dedicated to Voice-over IP communication within the network.

19. (original) The system attribute exchange method of claim 18, wherein the switching device is made aware of the VLAN identification via a VLAN registration protocol.

20-26. (canceled)

27. (previously presented) The system attribute exchange method of claim 8, wherein the media access controller (MAC) address is a broadcast MAC address.

28. (original) The system attribute exchange method of claim 8, wherein the MAC address is a multicast MAC address.

29. (previously presented) The system attribute exchange method of claim 19, wherein the VLAN registration protocol is the Group Address Resolution Protocol (GARP) VLAN registration protocol.

30. (previously presented) The system attribute exchange method of claim 12, wherein one or more system attribute are transmitted to a relation database that associates at least one port number to its geographic location, whereby the physical location of the one or more devices is determined from the MAC address of the Voice-over-IP device.

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31-37 (canceled)